FIGURE 1

1						cttgcaggca
61				ttcaaatatt		
121						agtttaaatc
181						gttggtgcca
241	cacacacctt	aacacctgca	cgctggcaac	aaaaccgtcc	gctctgcagc	acagctgggg
301	tcacctgacc	tttctcctgt	ccccccact	tgagctcagt	ggctgggcag	caggggatgc
361	atggccactg	gcggccaggt	gcagctctca	gctggggtgt	tcagaggacg	cctgtgtcct
421				ggcagagaac		
481	ggaatgtcaa	caggcagggg	cagcactgca	gagatttcat	catggtctcc	caggccctca
541				gctgcctggc		
601	ttttctccat	aaacttggtg	gaagggcagt	gggcaaatcc	aggagccagc	ccgggcttcc
661	caaaccccgc	ccttgctccg	gacaccccca	tccaccagga	gggttttctg	gcggctcctg
721	ttcaatttct	ttccttctag	aaaccagcat	ccaggcacag	gaggggaggc	ccttcttggt
781	agcccaggct	ttggcgggat	tatttttcaa	agaactttag	gagtgggtgg	tgctttcctg
841				aagcgcaggg		
901	gcaggaagtg	cgcacagggt	gctcccaggc	tggggagcac	aggtagggga	cggtgcgtgg
961	gggatggcgc	ctggggcatg	ggggatgggg	tgtgggaaac	ggcatgtggg	gcgtagggga
1021	tggggtgtgg	aggatcgggg	gtggggatgg	cgtgtggggt	gtgggggatg	ggccgtgggg
1081	gggtggggcc	tgggaaacag	catgtggggc	atggggtgtg	ggggtgaggt	gtgggaaagt
	gtgtggggtg					
	gaggtgtggg					
	ggggcatgga					
	gtgtggggtg					
1381	ggatggcgtg	gggggtgtgg	catggggatg	gcacgtgtgg	catggggatg	gggatggggg
1441	gtggggcatg	gccgagtggg	gctggggctg	ggaatggtga	gtggggcatg	gggatggcga
1501	gtagggggtg	tggcgtgagg	atggctagtg	gggcgtgggg	atggcgtgtg	gggatggcga
1561	gtggggggtg	ggctgtgagg	gacagtgcct	gggatgtggc	tgcagcccta	gctcacagca
	tggccttatg					
	aaacacggga					
1741	ttttgtcctg	gggcccagtg	ggggcaacat	cacctccttc	ccctcccatg	gcaaagagcc
1801	agcccgcggg	gtggctactg	cagtgccccc	caaggagggt	gttccctgct	cgagaggaag
1861	tgaccgctcc	agcttggcct	tccctgggac	tggggtgcag	gcgattttat	cttctttgct
1921	ccattctgtt	ccttccagat	aatcgtgtgt	tcttcatcag	gttttcctca	gttcttgaga
	gcttttctga					
	ctccaagggt					
2101	tgtgggtgtc	ccgggggcgt	gggtgtcccg	ggagtgtggg	tgtcccgggg	gcgtgggtgt
	cccgggagtg					
2221	gtgggtgtcc	cgggagtgtg	ggtgtcccgg	gggcgtgggt	gtcccgggag	tgtgggtgtc
2281	ccggaggcga	gggtgtcccg	ggagtgtggg	tgtcccgggg	gcgtgggtgt	cccgggagtg
2341	tgggtgtccc	gggggagtgg	gtgtcccggg	agtgtgggtg	tcccaggggc	gtgggtgtcc
2401	cgggagtgtg	ggtgtcccgg	gggcgtgggt	gtcccgggag	tgtgggtgtc	ccggagcgag
2461	ggtgtcccgg	gagtgtgggt	gtcccggggg	cgtgggtgtc	ccggaggcga	gggtgtccca
	ggagtgtggg					
2581	gtgtcccggg	agtgtgggtg	tcccgggggc	gtgggtgtcc	cggaggcgag	ggtgtcccag
2641	gagtgtgggt	gtcccggggg	cgtgggtgtc	ccgggagtgt	gggtgttcca	gaggcgaggg
2701	tatcccagaa	gtgtgagtgt	cccgggggtg	tgggtgtccc	gggggcgtgg	gtgtcccggg
2761	agtgtgggtg	tcccgggggc	gtgggtatcc	cagaagtgtg	agtgtcccag	gggcgtgggt
	gtccgggggc					
2881	gcgtgggtgt	cggggactgc	agggacatgg	gcctcccctc	ccactcctgc	cgcccagggc
2941	acctcctgtg	aggactcgga	gtccgtgagt	tcccacctcc	ttgagcccga	ttctttggtg
3001	teeeegeetg	catcctcagc	ctccttccaa	accagaccag	ttctctaggg	gcgtcgacgt
3061	gtgaaactga	ttttaaagaa	aacaggcggt	ggcctttctc	tcggccccac	gtggcccagt

FIGURE 1 (continued)

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3121 agegeteace tteegteest tetteegege teagtaacea atttaggeeg eteetgeaga
3181 actoggete etgeceaceg geceacageg tecacetgag geetetteet eccageaaag
3241 gtcgtccctc cggaacgcgc ctcctgcggc ctctccagag cccctcccgc gcgtcctctc
3301 ageccegate gestectace ggggestecs totacegast gescasaggs cagtatecat
3361 cgcgggctga ggcaggttcg gcagcacggc gcccggggcg ggggtcactc tccaccaccg
3421 cgtggtgccc acagetcacg gcgetcccgg gtgacggtcc cetcggetgt agggegtcet
3481 gaagagegge etgeteggag etgagegeae ggggttgeet geecetggge gtetetggee
3541 ctcaccagce cegtetteec atgggcaaaa eggeggteet gtttgteeae aagtaacegt
3601 eggggttaeg gaggggeeag gagetgegge ggggggetgt geteteagga eeggeeeag
3661 gaggatccgc gcgaggtctg gagctctcag gggtcgcggg ggacagaggg gccccaagcg
3721 gaggcgggaa ggcggcagaa gcccaggacc gccaagagct ggcgaggaag cccggggctc
3781 gctgtcgggg gagccgggca ggggccgcgc ctcggcacca ggacgcgagg cctgggaagg
3841 cggatctggc cgcgagcacg cggtgcgggt ggagacgcag ggatttggat ttccgcgggc
3901 gctgcacgga tttccacgcg cggttcacgt gggccccagg gggtgcccgg cacccggggc
3961 egegeegeet teteetgeee ggeategaee egeageetea egtttaeege ggegeeegea
4021 gccccttcg cccgcttccg cgcgtgcccc cgagcgcgcc ctcgggatca gccccggaa
4081 gcagagaggc caggccggga aggatgggcg aacggggtgg ctgacccggg agcacggcag
4141 ggaggacacc cagccaggcc cgcgagcagc gccgctcccc tcctccagga cgggcgggaa
4201 cctgcgatgc ccccgccgcg tgggccgtgg ggcggtctcc gaggcactgg gcggggcacg
4261 eggtgggege tteaeggaac tegeatttee eagtettegt aacceaggag gaageeeaeg
4321 gcgtcctgca ccggcgccgg cgcgccaacg cgttcctgga ggagctgcgg ccgggctccc
4381 tggagaggga gtgcaaggag gagcagtgct ccttcgagga ggcccgggag atcttcaagg
4441 acgcggagag gacggtgagc ccagcctcgg ggcgccccgc gcggacactg cacggcggcg
4501 gtgaaccagg cegegtgggg cegectgegt etetttgget geggeetgtg ggeggegaac
4561 acgcagegge gecegegege gegetetete tgegggggte gettteegee eggggtgaet
4621 ccgctttcct gggcgatgcc cccacccca ggcacgcgct ctccccgtgc ggccgcaccg
4681 cgcatgccgg ttttcacatc agaaaatacg atttgcacaa gcacacttag ggtgtccccc
4741 ttaaetteee aagggagtee eeceagteee egaagteeag ggeageetge geategeaga
4801 cgcgcgcgc tcgcagaagg gacgtggtga gaagctggcc cacagcatgc caccagcggc
4861 acctectcag ggcacgtgte ggggagaaac aacaettagg gaccetggga etttetecag
4921 ctcacgctca cgggtccacc tcacactacc aagatcacct caatagacgg acactcacac
4981 agggcacact tcacactcac aggtcacctc acactcacag gacacctcac actcacaggg
5041 cacacttcac actcacgggt cacctcacac tccaagatca cctaaagagg acacctcaca
5101 cagggcacac ttcacactca caggtcacac ctcacacaga tcatctcatt ctcacaggac
5161 acctecetet cacaggicae etcacactea caggacacet cacagaggic accteacace
5221 cacaggacac ctcacagagg tcacctcaca cggggcacac ttcacactca ggtcacctca
5281_cacccacagg acacctcaca_gaggtcacct cacacccaca_ggacaactca_cagaggtcac____
5341 ctcacacagg acacctcaca aaggtcacct cacacccaca ggacacctca cactcatagg
5401 cacctcagtc ttacaggaca actcacactc acaggtcacc tatctcacag gacacctcac
5461 actcacaggt caccttactc tcacaggaca cctcacacag ggcacacttc actccacagg
5521 tcaccatacc tcacacagat cacctcatac tcacagatca cttcattcat tctcacagga
5581 tacctcacac tcagggcaca cttcacactc acaggtcaca cctcacacag atcatctcat
5641 teteacagga cacetecete teacaggtea cettacaete ateteacaet cacaggtege
5701 cacacctcac actcacagga tgcctcacac tcacagaacc acatctcata tgcacaagac
5761 acctcacact caggacacct catgctcaaa gaagcctcac actcacagga ggtccagctg
5821 totgaggcaa aggotaacat gaccotttoc agacaaattg aggatggtca tgcctagcat
5881 ttttatacac ctagttttga aagcatttct catctgttgt attctcacag caccccgtga
5941 gtttaagttc aggtggccaa cagtttcttc agcaatcact tttttctgtg gagtgctttt
6001 gctgtttgtg gaatattttg catctgctac tgcaccctct ccccgtatgt gtggccaccc
6061 tgtcagaggt ggagctgtgg ctcagagcct gtgtacctcg tcccaggtcc acagctcagc
6121 gacagaagag tcagggttga acctcgggtg ttctgacttg ggagcaggaa atgtgtggtc
6181 acccatagtt ccagatgtcc tggggagggg ccaagattag aagaaaccta cctcagctcc
6241 agaggaaagt ctggcttcct gagcccaccc cgccagaccc aggtccaagt ccccaaccc
6301 cagttcatgg tgtgtccagt gcttaccgtt gggtgctctg gtgaaggtgc atctcacgag
6361 gcttgctctc ttgttccttc agaagctgtt ctggatttct tacagtggtg agtggatgat
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FIGURE 1 (continued)

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6421 caccaccagt cctgcctgca accettetea gettactgae accageceae tecacagatq
6481 gggaccagtg tgcctcaagt ccatgccaga atgggggctc ctgcaaggac cagctccagt
6541 cctatatctg cttctgcctc cctgccttcg agggccggaa ctgtgagacg cgtaagqccc
6601 cactttgggt cccatatttg cagagggccc tggggagctg gtggaggtgg cctggccaac
6661 cgggctgcag ggtgcaacaa cctggtgggg tgtgtaggcc gggcattcag ggctcagccc
6721 agttggaaat tggtctaggt gacctttaaa tcccttccag tctgaggtct ttgacaggga
6781 cccaaggttc tgattatcag actcagtggc ccccttcgcg gtcccggccc tgggcaactt
6841 ctcagccctg gagactggcc cagttgagag tccctgtgtc ccgtgtgccc attccagatc
6901 ccacctaget aggtaccegt ttggtaaact teeeettete etaettteea ttacaaaqqt
6961 ttgaggggtt tgtttttttt tttaaccatc tgaatattaa attaatcaca aagtttaggg
7021 cccccaacct cccttgggtt cagtaattca ctagaaggac acatagaaat ccaaatatcc
7081 actgagtgga tacactcaca ggtaccgttt attacagcaa aggatgcagg cttaagtctg
7141 cagagggacc agggacaagc ttccccttgt cctctcctgt ggggtcatgt ggacatcctt
7201 aatteteeca gaatgaegtg tgaegagaac gtgggaagta etgeeaaact tggggaaege
7261 tacgagecce gtgtecagag gtttgateag ggeteaatga catagaceca getgaecagg
7321 cacgcatggc tgacctcagt ctcagcccct ccagagctac gccgataatg cggccaaggc
7381 cccaccatac atcacattgt cagctagacc atccagcatg gctcaaggcc caggtaaaca
7441 ccaacattcc ctcaggcaag accttccaag ggcttagcgg tcatttccca ggagccaagg
7501 caaaggetae cetttetetg geacageagt teateettga ceacecaaga ceacattett
7561 acactgaatg ageteteetg tgeageagee attttettet etaageagaa gagageeeag
7621 caagetggag gaggetgaag agagaggett cetgetggte atetgggtee agaatgeetg
7681 gagatetetg eteageeetg gtgeeeagea geeetggtgt geateetgea gggeageett
7741 cccgccggag tcctggactt gctcagggcc actccccttg cccatgtcaa ccaaagtcag
7801 gctgccggtt ctgcttcttc tgtctgagcc catgaccagt gctgggacta actgtcccc
7861 aggegggete aeggtggtae gaggeeaget tggagaaetg teteagetet etggteetet
7921 cgtcagttgg gtctctgatt ggaaagtccc ttggacactt taccatcccc attggacttt
7981 cactttcccc caggetccca tcagetgctc ggaagagtgg tcaccctgga ggccactgcc
8041 daddaydday ydaddddda aatycaaccy cagccagcac tgccagccac tggcaaggct
8101 gttcagacat gtggctcctc tgatccacgc cttgtccttt ggatcagtcc acggagcagt
8161 gtgccaagct caggetetgt cacccacage teatgecace ttecaggeag aacaccactg
8221 ctgacccagg ggcatggcca ccccgggggc tggcgtctcg ctgaccccca gaagcccctc
8281 tcagggtgtc cccttcctgt ccccagacaa ggatgaccag ctgatctgtg tgaacgagaa
8341 cggcggctgt gagcagtact gcagtgacca cacgggcacc aagcgctect gtcggtgcca
8401 cgaggggtac tetetgetgg cagacggggt gteetgeaca cecacaggtg accaggette
8461 atgtcccagt cccagatgac accagtccct gtcccactag gattatctta ctggacaaaa
8521 gacgggtggg actggccttc acatctactg agcactaact atgcactgac caattgtgaq
8581 gtgggatetg ggcaccaagg gtggcacagg ccagcagcga ccagtgacta ggatgggcac
8641 cctgggggca atccctgaat ggcctcaggc cccctgccaa cttctaggca gaccagggga
8701 gccaagcaag gcactatoto acgtocaact gcccactogo aggaatooto cgccagggtt
8761 catgaatcta etteggeaca gecaatgtet gtaetgaetg etgeecaete tgeattecaa
8821 aactcgtaaa ggctcctggg aaaatgggat gtttctccaa accagcctgg aacgaatggg
8881 ctgcacttcc aaaagcaggg acaccccaca cccactgtct ctaaagaggc ggaacgtgcc
8941 caccetggce acacageetg ggacteagee tgecacetee tegggettee tttetggeee
9001 aagacettga ttgaagcaga tcaaaactaa gcatgggatc aaaacaacac agtttgattc
9061 atctttaggt agaatttcat tcaccttcta ctaaagtcaa acaacacatc ttctccctqa
9121 aaagtgagca gagggcggtt ttaagacgta agccctctgt ttcctccaaa accagccctg
9181 accattgtct cctcagccag ccacttcttc aagggcctct catggccggg ccccaccagt
9241 caggeccage egaggecetg cettecacea eccetgggec etgggagete etgeteetgg
9301 gggcctccca tagcctcggc ctcaaggcct ctcagaggat gggtgtttct gaatctttcc
9361 tagtggcacg ttcatccctc acaaatctct gcatctttct gacttttgtt ttacacagtt
9421 gaatatccat gtggaaaaat acctattcta gaaaaaagaa atgccagcaa accccaaggc
9481 cgaattgtgg ggggcaaggt gtgccccaaa ggggagtgtc catggcaggt aaggcttccc
9541 ctggcttcag gattccaagc cctgagggtc ttgaagcctt ttgaatgtga acaacagctc
9601 tggaagggaa aatgggcagg tcagcccaag cccacaggct ccaagtcagc acacctagca
9661 cctccagctc gcggcacccc catgctttta gtggggcaag gaaggagaaa agaaaacgac
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FIGURE 1 (continued)

9721 actcactgag ggtctaccct gtgcagagaa ccctgcgaga tgccccatcc gagttgtcac 9781 gtcgtcctca cggttactct ttgaggtggg atctttgcct gatctttgca aaatcaggag 9841 cattggatca aagctatgtg aagatcctgt gaggtgaaca gtgaaatctc acagcgacat 9901 ttgtattett gggeegtgee caagageaeg teteggetag agaggggeae ageeteeeag 9961 agccaggtct gagcagcttt gcctgggagg gatctgcaaa gaccccagga tttcagaaag 10021 aaattgtgca atgccagagg ttccttggca tgcccgggag ggcgagtcat cagagaaaca 10081 atgacagcaa tgtgacttcc acacctcctg tcccccgcc caggtcctgt tgttggtgaa 10141 tggageteag ttgtgtgggg ggaccetgat caacaccate tgggtggtet eegeggeeca 10201 ctgtttcgac aaaatcaaga actggaggaa cctgatcgcg gtgctgggtg ggtaccactc 10261 teccetytee gacegegyty etggytyggt gecaetette cetyteegae egegytyety 10321 ggtgggtgcc acteteceet gteegaeege ggtgetgggt gggtgeeaet eteceetgte 10381 cgaccgcggt gctgggtggg tgccactctc cgctgtccga ccgcggtgct gggtgggtac 10441 cactetecee tgtetgaeeg eageteteaa gtgteteagg ggetgtgget etgggetteg 10501 tgctgtcact tccacagaca gacagacatc cccaaaaggg gagcaaccat gctgggcacg 10561 actgcctgtg gcaccgtgct ctcagccact ttcccatgcc caaataaaac gataaaagac 10621 tgggggette tgcccatect gcctcacttg accaagagee cagaagagga tgcgacacee 10681 agggcctcat gggaccaccg gctggcaggg gttctgctca ctgggtttat gggtgagacg 10741 agcactecca ggagggecae tgggeeggga agaactgtgg agaategggg caegeeetgt 10801 cctcccagct gccagggcac agcatccctt ccccacctgc aacacccaga ccccagattc 10861 accccagttc acttgtcccc acacgagcca caggctgcca cctggggcag gctggcccac 10921 cttggggtta gatgcaggtc cccttgcccc agaaggagac tgcagcccct gcagacctag 10981 aaatggccac agcccatccc catgcaccag ggggtgaggt ggcaggtggt ggaaagggcc 11041 tgaggggggc ttcttccttc caggcgagca cgacctcagc gagcacgacg gggatgagca 11101 gagccggcgg gtggcgcagg tcatcatccc cagcacgtac gtcccgggca ccaccaacca 11161 cgacatcgcg ctgctccgcc tgcaccagcc cgtggtcctc actgaccatg tggtgcccct 11221 etgeetgeee gaaeggaegt tetetgagag gaegetggee ttegtgeget teteattggt 11281 cagcggctgg ggccagctgc tggaccgtgg cgccacggcc ctggagctca tggtcctcaa 11341 cgtgccccgg ctgatgaccc aggactgcct gcagcagtca cggaaggtgg gagactcccc 11401 aaatatcacg gagtacatgt tctgtgccgg ctactcggat ggcagcaagg actcctgcaa 11461 gggggacagt ggaggcccac atgccaccca ctaccggggc acgtggtacc tgacgggcat 11521 cgtcagctgg ggccagggct gcgcaaccgt gggccacttt ggggtgtaca ccagggtctc 11581 ccagtacatc gagtggctgc aaaagctcat gcgctcagag ccacgcccag gagtcctcct 11641 gcgagcccca tttccctagc ccagcagccc tggcctgtgg agagaaagcc aaggctgcgt 11701 cgaactgtcc tggcaccaaa tcccatatat tcttctgcag ttaatggggt agaggaggc 11761 atgggaggga gggagggtg gggagggaga cagagacaga aacagagaga gacagagaca 11821 gagagagact gagggagaga ctctgaggac atggagagag actcaaagag actccaagat 11881 tcaaagagac taatagagac acagagatgg aatagaaaag atgagaggca gaggcagaca 11941 ggcgctggac agaggggcag gggagtgcca aggttgtcct ggaggcagac agcccagctg 12001 agectectta cetecettea gecaageeee acetgeacgt gatetgetgg ceetcagget 12061 getgetetge etteattget ggagacagta gaggeatgaa cacacatgga tgeacacaca 12121 cacacgccaa tgcacacaca cagagatatg cacacacacg gatgcacaca cagatggtca 12181 cacagagata cgcaaacaca ccgatgcaca cgcacataga gatatgcaca cacagatgca 12241 cacacagata tacacatgga tgcacgcaca tgccaatgca cgcacacatc agtgcacacg 12301 gatgcacaga gatatgcaca caccgatgtg cgcacacaca gatatgcaca cacatggatg 12361 agcacacaca caccaagtgc gcacacacac cgatgtacac acacagatgc acacacagat 12421 gcacacacac cgatgctgac tccatgtgtg ctgtcctctg aaggcggttg tttagctctc 12481 acttttctgg ttcttatcca ttatcatctt cacttcagac aattcagaag catcaccatg 12541 catggtggeg aatgccccca aactctcccc caaatgtatt tctcccttcg ctgggtgccg 12601 ggctgcacag actattcccc acctgcttcc cagcttcaca ataaacggct gcgtctcctc 12661 cgcacacctg tggtgcctgc cacccactgg gttgcccatg attcattttt ggagcccccg 12721 gtgctcatcc tctgagatgc tcttttcttt cacaattttc aacatcactg aaatgaaccc 12781 tcacatggaa gctatttttt aaaaacaaaa gctgtttgat agatgtttga ggctgtagct 12841 cccaggatcc

FIGURE 2

MVSQALRLLCLLLGLQGCLAAGGVAKASGGETRDMPWKPGPHRVFVTQEEAHGVLHRRRRANAFLE ELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWISYSDGDQCASSPCQNGGSCKDQLQSYICFCLPAF EGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSLLADGVSCTPTVEYPCGKIPILEKRN ASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGGTLINTIWVVSAAHCFDKIKNWRNLIAVLGEHD LSEHDGDEQSRRVAQVIIPSTYVPGTTNHDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVS GWGQLLDRGATALELMVLNVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPH ATHYRGTWYLTGIVSWGQGCATVGHFGVYTRVSQYIEWLQKL MRSEPRPGVLLRAPFP